

Ship Via:

Meekel 2019-8-8

AP 2019/08/26
Michel

SMB
19/8/27

Part Op **100** - Issue S/N.

Descriptions: **110** - Sheet 1 ***All assembly to be done in accordance with SWA swivel manual*** Engrave T/N And / or S/N number as required Using Marktronic engraver as per DWG. Laser engrave dart logo as per DWG. Small Fab-6 (Small Fab) - Assemble as per DWG. Sheet 1 ***All assembly to be done in accordance with SWA swivel manual*** Engrave T/N And / or S/N number as required Using Marktronic engraver as per DWG. Laser engrave dart logo as per DWG.

120 - (QC5- Inspect part completeness to step on W/O) Engrave T/N And / or S/N number as required Using Marktronic engraver as per DWG.

130 - Packaging3 (Identify as per dwg & Stock Location: _____) Bag and tag
135 - DC (Document Control) Photocopy blue file OM & OOPM-SWA6A RevG
140 - (QC21- Final Inspection - Work Order Release)

Lactite 242 (5186572)

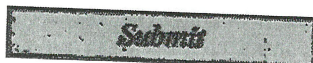
Loctite 620 (5194792)

Silicone gel (M139008)

Aeroshell grease No. 7 (5138964)

Work Order 198417Customer Order 7302Number of Wires 3Date 2019-8-13Serial Number 5203827

Number of Cycles	Load (Lbs.)	Action	Pass/Fail
1	6,000	Check for Conductivity against all wires.	- Pass
1	6,000	Check all wires for grounding against swivel body.	- Pass
1	3,000	Check for Conductivity against all wires.	- Pass
1	3,000	Check all wires for grounding against swivel body.	- Pass
1	1,500	Check for Conductivity against all wires.	- Pass
1	1,500	Check all wires for grounding against swivel body.	- Pass
1	0	Check for Conductivity against all wires.	- Pass
1	0	Check all wires for grounding against swivel body.	- Pass

Test Conducted By: Michel Lalonde
TechnicianSignature: Sylvain Boyer
QC 5 Small FAB / QA



Electric Swivel
SWA6A

Work Order 198417

Customer Order 7302

Number of Wires 3

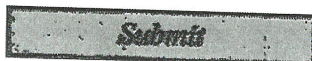
Date 2019-8-13

Serial Number S203827

Number of Cycles	Load (Lbs.)	Action	Pass/Fail
1	6,000	Check for Conductivity against all wires.	- Pass
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1	3,000	Check all wires for grounding against swivel body.	- Pass
1	1,500	Check for Conductivity against all wires.	- Pass
1	1,500	Check all wires for grounding against swivel body.	- Pass
1	0	Check for Conductivity against all wires.	- Pass
1	0	Check all wires for grounding against swivel body.	- Pass

Test Conducted By: Michel Lelonde

Technician



Signature: Sylvain Boyer
QC 5 Small FAB / QA

DQA:

LR

Date:

Oct 7/19

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed:

Date:

Work Order update only ☐

Work Order: <u>198417</u> Part No. <u>SWA### Swivels</u> NCR No. <u>19-7396</u>		DISPOSITION Rework ☒ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☒ Quality ☐ Other ☐																																																																																																																																			
Date: <u>2019/08/26</u>		Step #: <u>110</u>		QTY Effective: <u>①</u>		MRB (QSI042) Approval <u>MLee</u> Feb 01, 2018																																																																																																																																	
Description Work Order Deviation - Use a combination of heatshrink tubing and RTV Silicone to create a watertight seal around all electrical connections. - Use a D2728-1 Placard in place of the laser engraved Dart logo				Disposition These deviations are acceptable to carry out on the following swivels: - SWA3 - SWA6A - SWA10A - SWA15A - SWA25A - PSWA25A - HH40-0280002 <u>MLee</u> There is no impact on fit, form or function.				Completed By <u>A. PATRY</u> Lead hand / Supervisor Approval Verification DAS 9 9-89 <u>20-01-03</u>																																																																																																																															
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Entered: CBDate: Oct 7/19NCR No. 19-7396

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐Job: 198417Part No. C series hooks and SWA Swivels

DISPOSITION

 Rework ☒
 Scrap ☐
 Use-as-is ☐

DEPARTMENT/PROCESS

Skid-tube ☐	Cross tube ☐	Eng. (Non-AW) ☒	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Water Jet ☐
Large Fab ☐	Finishing ☐	Rec/Store/Packaging ☐	Supplier ☐
			Quality ☐

Date: 19.11.01Sequence #: 100QTY Affected: ①

MRB (QSI042)

May, 9 2019

Completed By

ALAN PATRY
 NOV 1 2019

Lead hand / Supervisor

DAS
30
9-89 NOV 1 2019

QC / QA Coordinator

DAS
9
9-89 10-01-03

Description Work Order Deviation

The electrical wires listed under "Acceptable Alternate Wire" on the attached sheet are acceptable to use in place of the "Drawing Specified Wire"

Disposition

This deviation is acceptable.

No change to fit form or function.

The job route must specify the wire that is called out on the drawing

The inventory P/N must reflect the same P/N that was received from a vendor

Root Cause

Operator	☐
Manufacturing Process	☐
Equip/Tooling	☐
Handling/Preservation	☐
Material	☐
Product Improvement	☒
Process Improvement	☐
Human Factors	☐

FAULT CATEGORY

☐ Pressure/Forced	☐ Contamination	☐ Power Loss/Surge	☐ Positioned Wrong
☐ Bending	☐ Misaligned/off center	☐ Folio/Program	☐ Outside Tolerance
☐ Crushing	☐ BOM/Route	☐ Grain Direction	☒ Drawing
☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Finish
☐ Crimp/Kink/Ripple/Wave/Twist	☐ Incomplete/Unclear Instructions	☐ Wrong Stock Pulled	☐ Part Lost/Missing
☐ Marks/Chatter	☐ Drill Holes	☐ Out of Sequence	☐ Misread
☐ Mislabeled	☐ Fit/Function	☐ Off-set/Set-up	

Other/Details:

P/N	Revision	Drawing Specified Wire	Acceptable Alternate Wire
C2	2	MIL-C-27500 11-14416	N/A
C3	2	MIL-C-27500 11-14417	N/A
C10	3	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
C15	2	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
C20	C	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
C45	C	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
C60	C	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
C250	C	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA3-2	3	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA3-3	3	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA3-4	3	EL 414-ARTIC 4/14	Texcan 01121-744A5
SWA6A-2	E	Texcan 01121-724AM	N/A
SWA6A-3	E	Texcan 01121-734A5 or 01004-08-047	N/A
SWA6A-4	E	Texcan 01121-744A5	N/A
SWA6A-6	E	Texcan 04121-764A5	N/A
SWA6A-8	E	Texcan 12701-08-014 or McMaster 7081K38	N/A
SWA10A-2	3	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA10A-3	3	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA10A-4	3	EL 414 ARTIC 4/14	Texcan 01121-744A5
SWA10A-6	3	EL 616 ARTIC	Texcan 04121-764A5
SWA10A-8	3	Polar Wire 30806	Texcan 12701-08-014 or McMaster 7081K38
SWA15A-2	1	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA15A-3	1	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SWA15A-4	1	EL 414 ARTIC 4/14	Texcan 01121-744A5
SWA15A-6	1	EL 616 ARTIC	Texcan 04121-764A5
SWA15A-8	1	EL 816 ARTIC	Texcan 12701-08-014 or McMaster 7081K38
SAW25A-2	1	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
SAW25A-3	1	3/14 SJTOW	Texcan 01121-734A5 or 01004-08-047
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